

Customer No.: 31561
Docket No.: 11644-US-PA
Application No.: 10/605,236

REMARKS

Present Status of the Application

Upon entry of the amendments in this response, claims 1-20 are pending of which claim 1 has been amended without prejudice or disclaimer in order to more explicitly describe the claimed invention. It is believed that no new matter adds by way of amendments made to claim 1. For at least the foregoing reason, applicants respectfully submit that claims 1-20 patently define over prior art of record and reconsideration of this application is respectfully requested.

Discussion for objection to claims due to informalities

Claims 1-9 are objected to because of the following informalities: claim 1 recites a data exchange USB device having "an USB interface module comprising a USB host..., a USB device, and a functional module.

In response thereto, applicants made amendments to claim 1 without prejudice or disclaimer in order to more precisely clarify the claimed invention. It is believed that the amended claim 1 can overcome the objection of informalities.

Discussion for Rejection to claims

Claims 1,4,7-11,14-16 and 19 are rejected under 35 U.S.C.102 (e) (not "b"; believed that it is a typographical error) as being anticipated by Saito et al.(US

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2004/0042138 A1)(**Saito**, hereinafter).

In response thereto, applicants respectfully transverse the rejections based on the following arguments and thus withdrawal of rejections addressed to the claims 1, 4, 7-11, 14-16 and 19 is respectfully requested.

Rejections Addressed to Claims 1, 10 and 11

First of all, **Saito** relates to "Data transfer control device, electronic equipment, and power supply switching method." As stated in Para. [0049] of the **Saito**, it provided "a data transfer control device, electronic equipment, and a power supply switching method **capable of reducing unnecessary power consumption** in the case of transferring data between peripheral devices of the OTG standard", more particularly, for the case that "a device conforming to the OTG standard (OTG device) is connected with a standard host conforming to the USB standard."

In the USB standard, the standard host must provide power to the VBUS line. However, **since the OTG device has a self-power supply, the OTG device operates by consuming electric power from its own power supply even though the standard host always provides power to the VBUS line, whereby unnecessary electric power is consumed.** In particular, in the case where the OTG device is portable information equipment, the battery life is decreased. (See **Para. [0048]**).

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As referenced to Fig.2 and Para. [0120] of the Saito, "the dual-role devices 10 and 20 include ID detection circuits 12 and 22, respectively. Each of the ID detection circuits 12 and 22 pulls up a signal line electrically connected with the ID terminal and detects whether or not the ID terminal is grounded depending on the voltage of the signal line. The ID detection circuit 12 shown in FIG. 2 detects a Mini-A plug since the signal line connected with the ID terminal is grounded. The ID detection circuit 22 detects a Mini-B plug since the signal line connected with the ID terminal is pulled up."

Since both the dual-role devices 10 and 20 can become the A-device, the dual-role devices 10 and 20 respectively include power supply control circuits VBA and VBB which supply current to VBUS. (See Para. [124])

In the OTG standard, the A-device can suspend supply of current to the VBUS line when there is no bus activity. Therefore, unnecessary power consumption can be reduced if battery-powered portable equipment operates as the host, whereby power consumption can be reduced. In the case where the B-device starts a session in this state and transfers data, the B-device can request the A-device to supply current to the VBUS line according to the procedure called SRP. The session used herein refers to a period in which the voltage of the VBUS line is above a given threshold voltage. (See Para. [0126])

The Saito disclosed "a data transfer control device, electronic equipment,

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and a power supply switching method **capable of reducing unnecessary power consumption** in the case of transferring data between peripheral devices of the OTG standard", which is totally different from the data-exchangeable universal serial bus (USB) device of the present invention.

ID Circuit Is Different From The USB Interface Module

In the Office Action, it is asserted that "ID circuit connected to ground or open is identical to an USB interface module of the present invention." As explained above, the ID detection circuit 12 of the dual-role devices 10 and the ID detection circuit 22 of the dual-role devices 20 are used to **detect whether or not the ID terminal is grounded depending on the voltage of the signal line**. Based on the USB On-The-Go (OTG) standard, the "ID terminal" is used for telling the status of the dual-role devices. (Please refer to USB organization Website <http://www.usb.org/developers/onthego/>) However, in the USB interface module of the present invention, it is not necessary to **detect whether or not the ID terminal is grounded**, instead, the USB interface module of the present invention includes an USB host core circuit, for communicating with the another USB device operating at a device mode, and an USB device core circuit, for communicating with the another USB device operating at a host mode, as claimed in claims 1, 10 and 11.

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The State Controller Is Different From The Function Module

In the Office Action, it is asserted that "the state controller 112 in Saito is identical to the function module in the present invention." However, after carefully reviewing overall of the specification of the Saito, Saito at least does not disclose, teach, or suggest the feature "the state controller 112 having a mass storage device for storage data output from another USB device" as asserted on Page 3 of the Office Action.

As stated in Para. [0173] of the Saito, "the data transfer processing circuit 110 includes a state controller 112. The state controller 112 switches between a host operation and a peripheral operation of an A-device (first device), or between a host operation and a peripheral operation of a B-device (second device) by state transition shown in FIGS. 5 and 6. The data transfer processing circuit 110 processes data transfer according to the OTG standard through data signal lines (data lines D+ and D-) by state transition of the state controller 112." The state controller 112 is used for state controlling between a host operation and a peripheral operation. The state controller 112 does not have "mass storage device for storage data output from another USB device", as claimed in claims 1, 10 and 11.

Saito Does Not Anticipate Claims 1, 10 and 11

For a proper rejection of a claim under 35 U.S.C. Section 102(b), the cited reference must disclose all features of the claim. See, *e.g.*, *E.I. du Pont de*

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Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 7 USPQ2d 1129 (Fed. Cir. 1988).

Thus, Saito does not anticipate claims 1, 10 and 11, and the rejections should be withdrawn.

Rejections Addressed to Claims Depending On Claims 1 and 10

If independent claims 1, 10 and 11 are allowable over the prior art of record, then its dependent claims 4-5, 7-9, 14-19 are allowable as a matter of law, because these dependent claims contain all features of their respective independent claim 1. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Additionally and notwithstanding the foregoing reasons for the allowability of claims 1, 10 and 11, these dependent claims recite further features and/or combinations of features (as is apparent by examination of the claims themselves) that are patentably distinct from the prior art of record. Hence, there are other reasons why these dependent claims are allowable.

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CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-20 of the present application patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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